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# 791

# Color It Green With Trees



A CALENDAR OF ACTIVITIES FOR HOME ARBORISTS

U.S. Department of Agriculture / Agricultural Research Service



*Color It Green With Trees* by selecting the right trees, planting them properly, and giving them the proper care.

The beauty of our land is a natural resource. Its preservation is linked to the inner prosperity of the human spirit.

*President Lyndon B. Johnson*



*The Bradford pear proves itself a tree for all seasons in experimental planting in University Park, Maryland.*

Improving and protecting America's ornamental and shade trees is one of the important jobs of U.S. Department of Agriculture scientists. Plant explorers introduce new and beautiful trees from around the world; other USDA scientists work at the National Arboretum in Washington, D.C., to adapt the trees to our climate and soils. Pathologists and entomologists learn to protect both native and imported trees from destructive diseases and insects; others seek better ways to plant and care for trees. The fruits of this work are reflected in the information in this booklet.



# January

The weight of a heavy, wet snow can damage limbs of trees and shrubs, especially evergreens. Shake off snow before it freezes.

Snow, "the poor man's mulch," protects tree roots from sudden temperature changes and intermittent freezing and thawing of soil.

Tramp down snow around roots of young trees to deter rodents from chewing bark; be careful not to break roots.

Plan now for spring plantings. Consider late blooming tree varieties—Chinese dogwood, crape myrtle, goldenrain tree—to extend flowering season.



Success in growing shade trees in the city depends most on selecting species tough enough to survive in an unfavorable, often hostile, environment. Then they must be cared for until they become established.

Trees planted in the open usually suffer less from today's environment (automobiles, industrial fumes, lawnmowers, encircling pavement, sewer and utility lines) than street trees.

Trees add dollars to the value of your property. Conversely, your property loses value when trees are removed and not replaced.

If your city authorities do a good job of street-tree maintenance and replacement, tell them.

*Consumers All*, 1965 Yearbook of Agriculture, tells how to make your grounds beautiful. See "Backyard—Or Garden," page 283. It also has useful guides on trees.



# February

Check on snow damage; saw off storm-broken tree branches. Cover cut surfaces with tree wound dressing to prevent entry of pests or diseases.

Beware of power lines when surveying or repairing tree damage after a wind or ice storm.

Do not let pruning tools come in contact with power lines even though the tools are supposed to be insulated.

If cold weather is over in your area, inspect for signs of insects, especially brittle, blue-black egg masses of tent caterpillars. Rub them off.

Before leaf buds swell, apply dormant spray pesticides on scale-susceptible ornamental trees—hawthorn, magnolia, flowering cherry, and flowering varieties of other fruit trees.



In spraying, pay special attention to tree crotches, bark crevices, and undersides of limbs. Follow directions on container.

Match a tree's characteristics with its intended use; decide if they are compatible before you buy.

The landscape architect uses trees to soften hard building lines and accentuate vertical or horizontal details.

A good street tree is one that provides shade and ornamentation, keeps within the bounds required of its growth, does not interfere with vehicular or pedestrian traffic, and stays healthy.



*Tent caterpillars prefer to overwinter in tree crotches.*



*Scales, shown on euonymus, attack most trees, shrubs.*



# March

If ground has thawed, you can plant deciduous trees now. Sizeable trees can be planted bare-rooted, if planted before leafing out.

In planting, be sure to: (1) Make hole big enough to allow root spread; (2) fill hole with good or improved soil; (3) leave saucer-like basin around base, extending several feet from trunk; (4) mulch; (5) stake and guy, being sure wires around tree are covered with rubber hose; (6) water thoroughly.

Never set tree below level at which it grew in the nursery.

No matter how porous the soil mixture added in a planting hole, you won't get good drainage if clay at bottom and sides holds water in the hole.

For good drainage in tight clay: Plant on the "high side" by building up area around rootball with good soil or lay drainage tile from bottom of hole to a ditch or special drain area.

To provide a drainage area, dig another hole, lower than planting hole; fill with gravel. Pipe or tile will carry excess water to it from tree roots.



*Children, directed by Scout leaders, plant trees to improve their school grounds.*

Evergreens should not be planted until late spring and never without a ball of earth.

Prune trees to remove dead or injured wood or to encourage a change in growth pattern. Weak wood favors insects and diseases.

Drastic pruning is a shock to a tree and may cause trouble later.

Don't leave stubs when pruning; stubs usually die and are entry points for decay fungus.

Small pruning cuts heal quickly; large cuts, more than 1 inch in diameter, should be painted with antiseptic tree dressing to prevent entry of disease or decay.

*Never* prune the leader (tip of main stem) on an ornamental *except* when you want the tree to spread out.



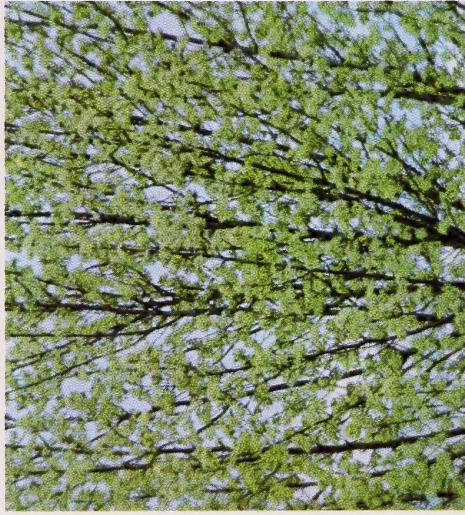
# April

If you have purchased deciduous trees that were stored out of ground during the winter, plant as soon as possible to facilitate new growth.

For most bare-rooted deciduous trees, cut tops back about one-third when planted to bring root system and top into balance.

If you had Japanese beetles in your garden last year, start pre-emergence treatment of the soil now. See Farmers Bulletin No. 2151, "Japanese Beetle: How to Control It."

Red and silver maples, willow, elm, and poplar often clog sewers. Avoid or plant well away from water and sewer lines.



*Treat soil now to kill grubs of damaging Japanese beetle.*

During new construction, if you have a choice of trees to be saved, in general, it is better to keep young, vigorously growing trees of desirable species; they will withstand adverse conditions and changes better than old trees or those of less vigor.

"Protecting Trees Against Damage from Construction Work" (Agricultural Information Bulletin No. 285) will help you choose.

Trees that once grew in shade and are suddenly exposed to increased sunlight, drying winds, and sharper temperature changes, often die or are badly damaged.

If an old tree is badly rotted or unsafe, it may be better to remove it than to try to preserve it.

Rodent damage at base of trees? Wrap trunk with aluminum foil or other screening to deter rabbits and moles.

Bargain trees frequently are the most expensive.



# May

Even in the coldest areas, new plantings of trees and shrubs should be underway.

Now is a good time to fertilize new or young trees and shrubs.

On established plantings, let the tree itself be your guide—if the leaves are paler or growth slower than normal, fertilize.

Use 2 pounds of 5-10-5 for each inch of trunk diameter measured about 3 feet from the ground. (A 1-pound coffee can holds about 2 pounds of fertilizer.)

To apply: Punch holes with a crowbar about 15 inches deep, 18 to 24 inches apart around dripline (outer tips of branches) of the tree; distribute fertilizer among holes, then fill holes with good soil. (A mixture of topsoil, sand, and peatmoss is good; it provides aeration and water access). Or, scatter fertilizer on ground; begin at dripline and work toward trunk.



*Trees help create an inviting first impression.*



*Aphids will attack trees as well as flowers and shrubs.*

With some cone-bearing trees (pines, spruces, and firs), pinch out half the new growth on side branches. Do not pinch off new growth on central leader.

Look for tree pests, particularly young aphids and scales.

Aphids are whitish, greenish, or blackish plant lice not over 1/8-inch long. They suck juices from leaves; many secrete a "honeydew" that draws ants. A sooty mold develops on this sticky mass, giving the foliage and other materials it covers a blackened appearance. Spray.

Scales, usually less than 1/4-inch long and of various colors, may be found on any part of the tree. They also exude honeydew on bark and other parts of trees that attract other insects.



# June

Start summer mulching to protect your trees from drought.

To hold moisture and insulate roots from overheating, use a light airy mulch like peatmoss that won't rob trees of water.

Put up stakes or guards to protect young trees from lawnmowers.

If you still have an elm tree, inspect it for Dutch elm disease. Look for wilting or yellowing leaves; cut diagonally through a branch with wilted leaves. Brown spots, an arc, or complete brown circle in annual rings of wood are signs of this and other elm diseases. Positive identification can be made only by laboratory tests.

The sick tree can spoil the best landscape design.



*Bagworms appear in late May or early June to attack evergreens.*



*Webworms attack mimosa and other shade trees in early summer.*

Look for and destroy bagworms, birch leaf miner, and webworm.

**Bagworms:** Caterpillars live in a cocoonlike bag to which bits of leaves cling. This pest prefers arborvitae and juniper but infests other trees and shrubs. Kill overwintering eggs: Destroy all mature bags before spring growth starts.

**Birch elm miner:** Feeds on plant tissue between upper and lower leaf surfaces, causing blotchlike or irregular serpentine mines. Spray.

**Webworm:** Several kinds; most common affects the mimosa and spreads from it to other tree species. Spray with DDT or, if branch is severely damaged, prune and burn.

Japanese beetles begin to emerge in June, heaviest buildup in July; highly destructive. (See April.)

Most evergreens have many roots near ground surface. Avoid deep cultivation that might wound roots.



# July

Water is especially important for a tree's first two growing seasons.

It is better to soak trees thoroughly once a week if no rains come than to sprinkle every day.

**Caution:** If your soil is tight clay, or underlain with hardpan, be careful not to overwater. Excess water kills some trees faster than drought.

If you have a special "needle" attachment for garden hose to inject water and water-soluble fertilizer into root zone, you will find it especially useful for watering curbside trees.

Pinch off faded magnolia flowers to stimulate new growth and thicken crown.

Bird houses will attract birds that eat insect pests. Flickers eat ants; yellow-billed cuckoos eat tent caterpillars; hawks and owls eat moles, fieldmice, grasshoppers, and beetles. The brown thrasher, cardinal, Baltimore oriole, grosbeak, and kingbird eat a variety of pests.



*The shower tree is a favorite in Hawaii.*



*Japanese beetle population reaches peak in July.*

To attract birds, plant red cedar, dogwood, holly, sumacs, crabapples, and hackberry.

Which trees to plant under old giants whose days are numbered? Try beeches or hemlocks, two of our most shade-tolerant trees.

Japanese yews or junipers can be closely sheared and kept to size for years to provide focal points in garden plan or even the smallest apartment plot.

If you want to propagate some of your favorite shade or flowering trees, take cuttings in midsummer. See Home and Garden Bulletin No. 80, "Home Propagation of Ornamental Trees and Shrubs."

Trees can screen out undesirable sights, muffle street noises.



# August

This is usually a critical time for water. If necessary, let the grass go and put available water on new trees and shrubs. (Grass will come back with the first rain.)

Examine trees for any unusual growths, scales, excretions, or fungus. Many pests and diseases can kill trees.

Check off-color foliage, especially on conifers, for presence of red spider mites. Apply insecticide, if necessary.

Spot any bagworms? Eggs overwinter, so take off and burn.

Injury from fall webworm shows in late summer or early fall. It does not attack evergreens. Flimsy, white webs enclose leaves of branches up to several feet across. Spotted caterpillars inside eat foliage without leaving web. Remove webs and burn.

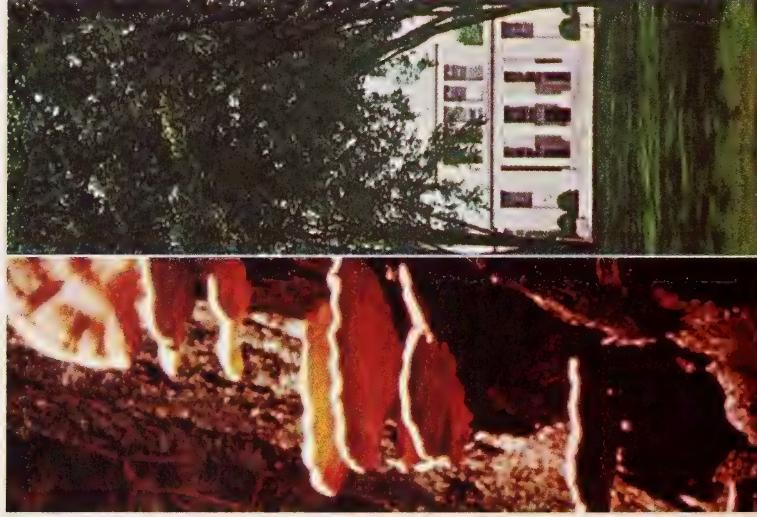
A mower in careless hands can severely damage tree bark at the base of trees; wounds can become immediate focal points for infectious diseases.

The health of a tree depends on the extent and effectiveness of its feeder roots. Avoid damage to roots during construction. Even if damage does not kill tree, it could make it easy prey to pests and diseases.

No single item distinguishes a city more than its green areas, and probably our first reaction to a community is to its abundance or lack of trees.

The homeowner plants trees to give scale and proportion to desired features of his property and to delight his family with spring bloom and fragrance, green coolness in summer, color in autumn, and interesting twig-and-branch patterns in winter.

Trees form vistas, frame views, and define city park areas.



Fungi can kill trees. Trees form vistas . . .

# September

Needle leaf or cone-bearing evergreens can be moved now if you want to transplant. Never move without ample rootball. Do not move magnolias now—wait for spring (unless your soil never freezes).

Generally, it is best for amateur arborists *not* to move deciduous trees before their leaves fall.

Move tree with a good rootball. Spray a few days beforehand with a wilt-preventive to reduce losses.

Fall planting of trees gives you a headstart on spring and allows for sturdy root growth.



*The first hint of fall.*



*Red spider mites attack many trees and shrubs.*

Look for spider mites on ornamental and fruit trees. Leaves have sickly color and undersides look as if they had been dusted with fine white powder. Mites overwinter in protected spots.

**Control:** Destroy overwintering hosts—poke-weed, Jerusalem oak, Jimson weed, wild blackberry, wild geranium, and other hosts that keep green foliage through the winter. Spray.

**Look ahead to winter.** Do you have supports and other protection for newly planted trees?

If your trees are staked and guyed, are the wires around the tree covered with rubber hose?

For well-developed fruit on your holly trees, there must be a male tree to pollinate the female trees.

A city of trees is a better place in which to live.

If a tree dies, plant another in its place.

—*Linnaeus.*



# October

Winter mulch before ground freezes. Put chickenwire collars or protective fences around young, newly planted trees.

Water evergreens; roots need moisture for the winter months.

When leaves fall, start a compost heap for next year's tree planting. Pile up leaves, add balanced fertilizer to hasten decomposition, and cover with screen or branches to keep leaves from blowing away.

If you find bark damage on trees, from equipment or pests, cut away dead and loose bark, paint with shellac or sealant, and follow with regular tree dressing.

To protect small, newly planted trees from harsh winds, make screens of snow fencing, lath, reed matting, or burlap attached to wood framing.

If pre-winter check shows rodent damage at base of tree, wrap it with aluminum foil before snow falls.

If you live in town, let city authorities know the location of dead or dying street and park trees that should be replaced next spring.

The sapling today is the historic tree of tomorrow.

Plant trees that thrive in your locality.

Trees bring beauty and graciousness and a feeling of welcome to streets that otherwise are purely functional.



*Bradford pear tree blazes bronze-red in the fall. Willow oak shows need for early treatment of wood decay.*

# November

Fall planting of deciduous trees and shrubs should be completed now.

Finish winter mulching before it snows.

Hardwood cuttings (made after tissues are fully matured) can be taken in fall, winter, or early spring. Consider hawthorne, dogwood, Japanese flowering quince, or olive for fall cuttings. (See July propagation tips.)

Still pruning? For greatest safety, engage professional arborists or tree surgeons to remove large limbs or do work that requires climbing tall trees.

Never prune out the terminal bud on a palm tree.



*Winter casts its shadows . . .*

Making plans for next spring? For specific help in selecting trees for your climate, try the:

- City arborist or park superintendent.
- County agricultural agent.
- State experiment station horticulturist.
- State extension landscape specialist.
- State highway commission.
- Local power company or cooperative.

If your community needs street trees, start now to help your citizens' association or civic club make plans. Try above sources as well as commercial nurserymen.

Wide windows in modern homes put more of the garden into view. Trees with distinctive branch and twig patterns enforce the scene in winter when most plants are leafless.

A city of monumental buildings needs trees to interrupt the reflected light.



# December

Review your year's garden activities. Order spring catalogs. Draw a landscaping map as a guide to further additions of trees and shrubs.

*Consumers All*, 1965 Yearbook of Agriculture, gives helpful hints on landscaping. See page 279, "Basic Points of Landscaping."

Keep your Christmas tree fresh and green by selecting a freshly cut tree, storing it in a cool place, and sprinkling daily until ready to use. Then, cut the butt diagonally about an inch above the original cut and set the tree in a stand of water.

Add water daily. A 6-foot Christmas tree may take up as much as a quart of water a day when first brought indoors. Water is needed to replace moisture given off by the needles in warm indoors atmosphere.

The more moisture the needles give off, the more fragrant the tree.



*Holly for Christmas . . .*

Prune holly to make use of greens and berries during holidays, although you may lose some flower buds on English and Chinese types.

More than 40 million evergreens are produced for Christmas trees each year.

Look ahead: Functional value of a tree is to provide shade—cool shade as opposed to warm shade of manmade structures.

Well-placed shade trees can reduce summer room temperature of a frame house in an arid climate by as much as 20 degrees.

Yellow is relatively rare among flowering trees. Consider cornelian cherry, golden chain, and goldenrain-tree for color change.

Apartment dwellers: Want a tree on your balcony next summer? Try Japanese maple, Hop hornbeam, or Foster holly in a tub.



**Shade Trees for Your Area.** Here is a partial list of trees adapted for use in various parts of the United States. Other trees, not on the list, may be as well or better adapted to your specific area. You can get lists of trees specifically adapted to your area from State authorities. In some States, a shade-tree commission issues lists of satisfactory trees. In others, this information may come from the Department of Parks, from the State forestry department, or directly from the State agricultural experiment station. Your county agricultural agent can direct you to the proper source.



*This giant elm, more than 70 feet tall and probably 75 years old, was really felled by the tiny elm bark beetle, which spreads Dutch elm disease.*

**Northeastern**  
**United States**  
 Ginkgo (*sterile form only*)  
 London planetree  
 Norway maple (*special selections*)  
 Red Maple (*special selections*)  
**Southeastern**  
**United States,**  
**Deciduous**  
 Sugarberry  
 Sweetgum  
 Water oak  
 Willow oak  
**Southeastern**  
**United States,**  
**Evergreen**  
 Cabbage palmetto  
 Camphor tree  
 Laurel oak  
 Live oak  
 Southern magnolia

**Southern**  
**Rocky Mountains**  
 Green ash  
 Lancelaf poplar  
 Linden  
 London planetree  
 Narrowleaf poplar  
 Northern catalpa  
 Norway maple  
 Siberian elm  
 Velvet ash  
 White ash  
**Plains Area**  
 American sycamore  
 Bur oak  
 Green ash  
 Hackberry  
 Maples (*special selections*)  
 Russian mulberry (*fruitless variety*)  
 Siberian elm  
**North Pacific Coast**  
 Common hackberry  
 European linden



Publications on trees, single copies available on request from the U.S. Department of Agriculture, Washington, D.C. 20230. Those with a price are for sale only at that price from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

- HG 117 "Trees for Shade and Beauty: Their Selection and Care" (10¢)
- AB 193 "Dutch Elm Disease and Its Control" (10¢)
- L 183 "Elm Bark Beetles" (05¢)
- L 184 "Elm Leaf Beetle" (05¢)
- G 88 "Growing the Flowering Dogwood" (05¢)
- G 80 "Home Propagation of Ornamental Trees and Shrubs" (10¢)
- G 81 "Maple Diseases and Their Control" (1962) (05¢)
- G 83 "Pruning Shade Trees and Repairing Their Injuries" (10¢)
- AB 22 "Palm Trees in the United States" (15¢)
- M 814 "Plant Hardiness Zone Map" (20¢)
- G 104 "Protecting Shade Trees During Home Construction" (05¢)
- AB 285 "Protecting Trees Against Damage from Construction Work" (15¢)
- FPL 92 "The Tulipree Scale"
- FPL 67 "Variable Oak Leaf Caterpillar"
- "Consumers All." 1965 Yearbook of Agriculture (\$2.75)
- "Trees," 1949 Yearbook of Agriculture (\$2.75)

Other publications related to beautification that may be useful to you in maintenance of your home grounds are available under same provisions:

- AH 270 "Evaluation of Bermudagrass Varieties for General-Purpose Turf" (25¢)
- L 199 "Gardenia Culture" (05¢)
- G 65 "Growing Chrysanthemums in the Home Garden"
- M 986 "Hobbed and Propagating Fringe, Plan No. 5971" (05¢)
- G 91 "Growing Flowering Annuals" (10¢)
- G 76 "Growing Ornamental Bamboo" (05¢)
- G 102 "Iron Deficiency in Plants: How to Control It in Yards and Gardens"



Spray to rid trees of maple bladder galls.



Elm leaf beetles take their toll.



Phloem necrosis gives butterscotch discoloration to inner bark of elm...

- F 2151 "Japanese Beetle: How to Control It" (1961) (15¢)
- G 53 "Lawn Insects: How to Control Them" (1964) (15¢)
- L 444 "Narcissus Bulb Fly: How to Prevent Its Damage in Home Gardens"
- F 2109 "Ornamental Hedges for the Central Great Plains" (10¢)
- F 2105 "Ornamental Hedges for the Northern Great Plains" (20¢)
- F 2055 "Ornamental Hedges for the Southern Great Plains" (15¢)
- F 2025 "Ornamental Shrubs for the Southern Great Plains" (20¢)
- M 957 "A Plastic-Covered Greenhouse, Plan No. 5946" (05¢)
- G 25 "Roses for the Home" (15¢)
- G 89 "Selecting Fertilizers for Lawns and Gardens"
- L 439 "Spring Flowering Bulbs"
- G 61 "Growing Iris in the Home Garden" (05¢)
- G 66 "Lawn Diseases—How to Control Them (15¢)
- G 51 "Better Lawns—Establishment, Maintenance, Renovation, Lawn Problems, Grasses" (1964) (15¢)
- G 71 "Growing Azaleas and Rhododendrons" (05¢)
- G 86 "Growing Camellias" (10¢)
- G 28 "Ants in the Home and Garden—How to Control Them" (10¢)



Use Pesticides Safely  
FOLLOW THE LABEL

ALWAYS WEAR PROTECTIVE CLOTHING

Caution: When using pesticides, read the container label . . . follow the directions . . . do not spray on a windy day.

Washington, D.C. Issued

March, 1967

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